Fla. Dept. Agric. & Consumer Serv.
Division of Plant Industry

The Florida Harvester Ant, Pogonomyrmex badius (Latreille)

(HYMENOPTERA: FORMICIDAE)1

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INTRODUCTION: The Florida harvester ant, *Pogonomyrmex badius* (Latreille), occurs throughout most of Florida; however, it is limited by ecological requirements. Where it does occur, the ant nest is readily visible as a large cleared area with a number of slow moving individuals on the surface near the nest. Harvester ants are so called due to their seed gathering for food.

<u>DESCRIPTION</u>: Abdominal pedicel consisting of two segments. Antennae clubless with twelve segments. Middle and hind tibial spurs very finely pectinate. Thoracic dorsum with the sutures obsolescent or absent; thorax not impressed between the mesonotum and epinotum; psammophore usually present. Worker caste strongly polymorphic, the major worker with a disproportionally enlarged head (after Creighton, 1950).

<u>DISTRIBUTION</u>: It is found from Florida to North Carolina and west into Mississippi (Creighton, 1950) and Louisiana (Cole, 1968). The ant is the only eastern representative of the genus *Pogonomyrmex* (Cole, 1968).

 $\underline{\text{BIOLOGY}}$: This ant differs from all other *Pogonomyrmex* in having polymorphic workers. The huge headed soldiers are not abundant in the colonies and seem to be no more agressive or pugnacious than the intermediate and smaller workers (Wheeler, 1910).

This ant nests exclusively or by preference in sand. It requires open areas in which to build its nest. Xeric hammocks are preferred. Many nests are found on lawns, around gardens, and in firelanes (Van Pelt, 1958). The mound is very slight and flattened with single or multiple entrances in the center and is from 30 to 60cm in diameter. The workers make no effort to clear vegetation from around the mound (Wheeler, 1910).

The ant is vigorously active in rather low relative humidity (below 55 percent) and in high temperatures ($35-40^{\circ}$ C). Winged forms have been observed in the nests in May, and mating flights were recorded for June (Van Pelt, 1958).

The ant harvests the seeds of many plants and stores them in the flat graneries of its nest. It not only collects seeds that have fallen to the ground but also plucks them directly from the plants, husks them and deposits the chaff on the kitchen middens at the periphery of the mound. Seeds from the following plants have been identified from nests: (1) ragweed, (2) crab grass, (3) small crab grass, (4) rough buttonweed, (5) sedge, (6) Paspalium sp., (7) poke weed, (8) red clover, (9) alfalfa, (10) evening primrose, (11) narrow leaf vetch, and (12) crotonweed.

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ECONOMIC IMPORTANCE: Pogonomyrmex badius is not of economic importance, is not aggressive and almost has to be forced to sting someone. The sting is among the more painful of those received from ants. A personal account of a sting episode by Wray (1938) is as follows: "Several ants stung me on the wrist, and after a few minutes an intense firey pain began in this area which was about two inches in diameter. It turned deep red in color and immediately a watery, sticky secretion came out of the skin. This area became hot and feverish and the excruciating pain lasted all day and up into the night."

<u>CONTROL</u>: Generally, control of the Florida harvester ant isn't necessary unless the ant is located where small children may be playing or in other similar circumstances. An adult may easily avoid the ant, thus avoiding the extremely painful sting.

In the event that control is necessary, efficacious materials such as baits, dusts, and liquids are available through local stores, home and garden centers, and other sources. Consult your local County Agricultural Extension Agent for approved insecticides for ant control. Read and follow label instructions and precautions before using any insecticide.

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This publication was issued at a cost of \$ 568.00 or \$.16 per copy to provide information on proper recognition of plant pests. PI87T-32